

Appln No. 09/575,110
Arndt. Dated September 17, 2004
Reply to Office action of July 28, 2004

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REMARKS/ARGUMENTS

The Office Action has been carefully considered. The issues raised are respectfully submitted to be traversed and addressed below with reference to the relevant headings and paragraph numbers appearing under the Detailed Action of the Office Action.

"Claim Rejections – 35 USC § 103"

At pages 2 to 4 of the Office Action, the Examiner rejects claims 1 and 6 to 10 under 35 U.S.C. §103(a) as being unpatentable over Silverbrook (U.S. Patent No. 5,805,178) in view of Harrington (U.S. Patent No. 5,737,455).

Claim 1 of the present application includes a half-toner/compositor which includes:

- a dot merger unit taking bits from the respective planes as inputs; and
- a colour mask register holding masking bits in number equal to the number of image planes;

wherein, the respective input bits to the dot merger unit are ANDed with respective color mask register bits and the resultant bits Ored together to form an output bit in a channel for which there is an ink at the print head.

The Examiner has asserted that features of the half-toner/compositor are described in Harrington column 7, line 25 to column 8 line 7. However, the Applicant fails to see any of the features of the half-toner/compositor described in this reference. In contrast to the present application, Harrington describes a method of "combining antialiased edges for printing or display at a grey level reproduction device" (see abstract). In particular, pixel shades are determined by assuming that a pixel is a blend of two shades and assigning shades to subpixels, such that the average matches the overall pixel shade (column 7). Harrington does not describe a half-toner/compositor which includes a dot merger, and a colour mask register, wherein the dot merger unit takes bits from respective planes as inputs, which are ANDed with colour mask register bits, and the resultant bits are Ored together to form an output bit in a channel for which there is an ink at the print head. Thus, the Applicant respectfully submits that claim 1 is not obvious over Silverbrook in view of Harrington.

The Examiner has also stated that Silverbrook does not describe the features of the half-toner/compositor as described by claim 1 of the present invention. Additionally, the applicant submits that claim 1 of the present application is further distinguished from Silverbrook. Silverbrook shows one decoder (decoder 405), which, in one example, is used to decode the count from the enabled counter 404. In contrast, claim 1 of the present invention describes a plurality of decoders to decode respective types of image planes in the received compressed page data. Examples of these decoders are shown in Figure 3 of the application. Similar arguments apply to Harrington, which does not describe the use of decoders. Thus, the Applicant respectfully submits that claim 1 is further distinguished over Silverbrook in view of Harrington.

Similar arguments also apply to claims 6 to 10.

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As neither Silverbrook nor Harrington teach or suggest the features of the half-toner/compositor as described by claim 1, the present claim 1 is patentable over the cited prior art.

Furthermore, there is a lack of motivation by the person skilled in the art, to combine Silverbrook and Harrington. Silverbrook is directed towards "digitally controlled printing systems, for example, being able to produce high quality colour images at a high-speed and low cost, using standard paper" (column 2, lines 57 to 60). Harrington provides a "method of combining antialiased edges for printing or display at a grey level reproduction device" (abstract). As Silverbrook is primarily concerned with colour images and Harrington is concerned with greyscaled images, a person skilled in the art would not be motivated to combine the documents. The Applicant also respectfully submits that halftoned images are not the same as greyscale images as the Examiner has stated in point 6 of the Office Action. Thus, Silverbrook and Harrington teach away from each other, and there would be no motivation for a person skilled in the art to combine their teachings.

If, however, a person skilled in the art were to combine the teachings of Silverbrook and Harrington, the present claim 1 would not be obvious in view of the combination. In particular, a combination of Silverbrook and Harrington does not teach, nor suggest the features of claim 1 as previously discussed.

In light of the above, it is respectfully submitted that the claim rejections have been successfully traversed and addressed. Accordingly, it is respectfully submitted that the claims, and the application as a whole with these claims, are allowable, and favourable reconsideration is therefore earnestly solicited.

Very respectfully,

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